

# **EXHIBIT 3**

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

ORACLE AMERICA, INC.,  
  
Plaintiff,

v.

GOOGLE INC.,  
  
Defendant.

Case No. CV 10-03561 WHA

**EXPERT REPORT OF ROBERT  
ZEIDMAN**

## Table of Contents

I.	Experience and Background .....	1
II.	Reliance Materials .....	2
A.	Java Source Code .....	2
B.	Android Source Code .....	3
C.	Software Tools .....	7
1.	Software Tools.....	7
III.	Background .....	8
A.	Software Source Code.....	8
B.	Java APIs.....	9
IV.	Assignment .....	9
V.	Summary of Opinions.....	10
VI.	Analysis.....	12
A.	Google Copied Declaring Code for the 37 Java API Packages from Java SE 5 in Android Gingerbread (API Level 9) and Android Lollipop (API Level 22).....	12
1.	Declaring Code .....	12
2.	Script Used to Identify Java Declaring Code Copied in Android .....	16
3.	Process .....	18
4.	Presence of Private Java Declarations.....	21
B.	Google Copied Declaring Code for the 37 Java API Packages from Java SE 5 in Other Versions of Android.....	22
1.	Source Code Analysis of Other Versions of Android .....	23
2.	Google’s Public Documents Confirm Copying Exists in Other Versions of Android.....	25
3.	Google Copied Declaring Code from Java SE 5 in Android Honeycomb. ....	30
C.	Google Copied the SSO of the 37 Java API Packages From Java SE 5 in Android.....	31
D.	Google Has Continued to Copy New Declaring Code and SSO of the 37 Java API Packages from Java SE 6 and Java SE 7.....	32
E.	Google Copied the Declaring Code and SSO of the 37 Java API Packages in Google’s “ARC” Product .....	33
1.	The App Runtime for Chrome (“ARC”) Technology Allows Android Apps to Run on Chrome OS Devices.....	33
2.	The ARC Runtime Introduces Android Runtime Components into Chrome OS Devices.....	34
3.	The ARC Runtime Build Process Contains the 37 Java API Packages. ....	36
4.	Android Apps Made Available for Use on Chrome through ARC Rely on and Use the 37 Java API Packages .....	37

VII. Conclusion .....	38
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- f. Android Ice Cream Sandwich (API Level 14) contains 11,692 declaring code statements from Java SE 5;
  - g. Android Jelly Bean (API Level 15) contains 11,692 declaring code statements from Java SE 5;
  - h. Android Jelly Bean (API Level 16) contains 11,693 declaring code statements from Java SE 5;
  - i. Android Jelly Bean (API Level 17) contains 11,694 declaring code statements from Java SE 5;
  - j. Android Jelly Bean (API Level 18) contains 11,720 declaring code statements from Java SE 5;
  - k. Android Kit Kat (API Level 19) contains 11,730 declaring code statements from Java SE 5;
  - l. Android Kit Kat (API Level 20) contains 11,731 declaring code statements from Java SE 5;
  - m. Android API Lollipop (Level 21) contains 11,734 declaring code statements from Java SE 5;
  - n. Android Lollipop (API Level 22) contains 11,735 declaring code statements from Java SE 5;
  - o. Android Marshmallow (API Level 23) contains 11,717 declaring code statements from Java SE 5;
44. I further conclude that Google copied the SSO for the 37 Java API Packages in Android Gingerbread (API Level 9) through Android Marshmallow (API Level 23).
45. I also conclude that Google copied 816 lines of declaring code from Java SE 6 and 223 lines of declaring code from Java SE 7 in Android Gingerbread (API Level 9) through

Android Marshmallow (API Level 23).

46. Finally, I conclude that by enabling Android apps to be run on Chrome OS devices such as Chromebooks, Google has copied the declaring code and SSO of the 37 Java API Packages.

## **VI. ANALYSIS**

### **A. Google Copied Declaring Code for the 37 Java API Packages from Java SE 5 in Android Gingerbread (API Level 9) and Android Lollipop (API Level 22)**

47. The following sections describe the tools and procedures I used to perform an analysis to identify instances where Google copied the declaring code and SSO from the 37 Java API Packages in Android. I performed the analysis described below on two versions of Android: (1) Android Gingerbread (API Level 9) and Android Lollipop (API Level 22). I also performed another analysis, as described in Section VI.B, to confirm that Google also copied declaring code and SSO in other versions of Android.

48. Note that the source code files for the 37 Java API Packages at issue are organized in the same directories and files in Android as they are in Java. For example, package `java.lang.reflect` was found in the Java directory path `\jdk1.5.0\src\java\lang\reflect\` and in the Android directory path `\libcore\luni\src\main\java\java\lang\reflect` where the last part of the directory paths was identical. These last parts of the directory paths represent the package names.

#### **1. Declaring Code**

49. The source code analysis focused on “declaring code” in the Java and Android platforms. “Declaring code” refers to source code that introduces or specifies an entity in the Java Platform. This includes declarations for packages, imports, classes, fields, methods, constructors, interfaces, and annotations. A summary of the various types of declaring code and

the list of copied declaring code in the final formatted spreadsheet. Also, on the occasion I found declaring code that was in fact copied but required a manual copy and paste of source code into the spreadsheet, I pasted in the clarifying declaring source code and noted the declaring code pair as copied in the final formatted spreadsheet. I then formatted the spreadsheet and sorted it based first on package name, then filename, and lastly the first line number of the declaring code in the Java source code.

69. I ran the process described in step 1 on the source code for Java SE 5, Android Gingerbread (API Level 9), and Android Lollipop (API Level 22). A spreadsheet summarizing the declaring code in Android Gingerbread (API Level 9) that was copied from Java SE 5 is attached as Exhibit F. A spreadsheet summarizing the declaring code in Android Lollipop (API Level 22) that was copied from Java SE 5 is attached as Exhibit S.

70. Based on my analysis, it is my opinion that Google copied the declaring code from the 37 Java API Packages in Android Gingerbread (API Level 9) and Android Lollipop (API Level 22) from Java SE 5.

#### **4. *Presence of Private Java Declarations.***

71. Exhibits F and S each contain a notable amount of declaring code that is declared `private`. Such `private` declarations are not part of the Java API specification documentation that are publicly accessible and cannot be directly used by software developers using the 37 Java API Packages in their own software. In other words, the `private` declaring code acts in many ways like implementing code.

72. Because the `private` declaring code is not part of the public Java API, Google could not have copied this declaring code from Oracle's online Java API documentation.

73. I understand from Oracle's counsel that Oracle filed a copyright registrations for Java SE 5 (and likewise for SE 6 and SE 7) and that this is *prima facie* evidence of Oracle's ownership of the private declarations.

code that Google copied from Java SE 5 into Android. They did not. The changes to the 37 Java API Packages for these versions of Android are attached as Exhibits Z (API Level 11), AA (API Level 14), BB (API Level 19), and CC (API Level 21).

105. The changes to the 37 Java API Packages in Exhibits Y through CC included additions (*e.g.* new classes or methods) and changes (*e.g.* changing a method from being abstract to non-abstract), and removals (*e.g.* removing a method from a class).

106. Where there were *additions* to the packages, these changes are not relevant to whether the declaring code in Android was copied from Java SE 5, though it may be relevant to copying from later versions of Java. *See* Section VI.D, below.

107. Where there were *changes* to the packages, I looked to see if the specific change suggested that Google did not copy the declaring code. None of these changes alters my opinion that Google copied declaring code the 37 Java API Packages from Java SE 5 in Android.

### **3. Google Copied Declaring Code from Java SE 5 in Android Honeycomb.**

108. As described in Paragraph 30, above, I was unable to analyze the Android Honeycomb (API Levels 11 through 13) source code, however I am able to identify the declaring code Google copied using the results from my analysis of Android Gingerbread (API Level 10) and Google's Diff Reports.

109. Based on my earlier analysis, I identified 11,723 lines of declaring code in Android Gingerbread (API Level 10) that were copied from Java SE 5. *See* Exhibit G.

110. The Diff Report for Android Honeycomb (API Level 11) identified changes to or additions of 29 lines of declaring code in `java.lang` and `java.util`. I confirmed that none of these changes were present in Java SE 5. On this basis, it is my opinion that there are 11,723 lines of declaring code in Android Honeycomb (API Level 11) that were copied from Java SE 5. *See* Exhibit H.

111. In the Diff Reports for Android Honeycomb (API Level 12) and Android Honeycomb (API Level 13), Google claims that it did not make any changes to the 37 Java API Packages. On



associated with a package.

117. I visually inspected the Java and Android documentation for each package in the 37 Java API Packages. I observed that the classes, interfaces, exceptions, enums, errors, and annotation types are organized in the same hierarchical manner, within packages of the same name, in Android as they occur in Java. Exhibit U shows a side-by-side comparison showing this identical hierarchical organizational structure for each of the 37 Java API Packages.

118. My visual comparison of the SSO of Java SE 5, which is expressed through this online documentation, shows the same hierarchical organization for the classes.

119. From the analysis above, I conclude that Google's copying of the declaring code for the 37 Java API Packages into Android also led to copying of the SSO for Java SE 5.

**D. Google Has Continued to Copy New Declaring Code and SSO of the 37 Java API Packages from Java SE 6 and Java SE 7**

120. In addition to copying declaring code for the 37 Java API Packages from Java SE 5, Google has also copied declaring code from later versions of Java: Java Platform, Standard Edition 6 ("Java SE 6") and Java Platform, Standard Edition 7 ("Java SE 7").

121. I understand Java SE 6 was released in December 2006 and Java SE 7 was released in July 2011. Thus at least some of the copying of the declaring code from Java SE 6 and Java SE 7 occurred after Oracle filed this lawsuit in August 2010.

122. I arrived at this conclusion by further examining the results of my analysis of the Android Diff Reports as described in Paragraphs 96–107. For each change to the 37 Java API Packages in Android, I looked to see when that change appeared in a version of Java. I did this by looking at the online API documentation for Java.<sup>6</sup>

123. For example, in the Diff Report for Android Kit Kat (API Level 19), it identifies class

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<sup>6</sup> In particular, I looked at documentation for Java SE 1.3.1 (<https://docs.oracle.com/javase/1.3/docs/api/>, download required), Java SE 1.4.2 (<https://docs.oracle.com/javase/1.4.2/docs/api/>, download required), Java SE 5 (<https://docs.oracle.com/javase/1.5.0/docs/api/>), Java SE 6 (<http://docs.oracle.com/javase/6/docs/api/>), Java SE 7 (<http://docs.oracle.com/javase/7/docs/api/>), and Java SE 8 (<http://docs.oracle.com/javase/8/docs/api/>).

GCMParameterSpec being added to package `javax.crypto.spec`. The online documentation for Java SE 7 identifies this class as being added in Java SE 7 and it is not present in the Java SE 6 online documentation. Therefore, I can conclude that this class (and the related constructors and methods) were introduced in Java SE 7.

124. Based on my analysis, I identified 816 instances of Google copying declaring code introduced in Java SE 6 into Android Gingerbread (API Level 9) through Android Marshmallow (API Level 23). A summary of my findings for Java SE 6 is attached as Exhibit V. I also identified 223 instances of Google copying declaring code introduced in Java SE 7 into Android Gingerbread (API Level 9) through Android Marshmallow (API Level 23). A summary of my findings for Java SE 7 is attached as Exhibit W.

125. By copying the declaring code from Java SE 6 and Java SE 7 in these versions of Android, Google also copied the intricate relationships of the classes, methods, interfaces, and fields in those packages, thus copying the SSO of Java SE 6 and Java SE 7.

**E. Google Copied the Declaring Code and SSO of the 37 Java API Packages in Google's "ARC" Product**

**1. *The App Runtime for Chrome ("ARC") Technology Allows Android Apps to Run on Chrome OS Devices***

126. The App Runtime for Chrome (ARC) is a runtime environment created by Google that allows the Android runtime to be used on Chrome OS devices.<sup>7</sup> One of the primary uses for this feature is the ability to run Android apps on the Chrome OS platform.

127. In order to use ARC to run Android apps, an app called ARC Welder is used. ARC Welder allows APK files<sup>8</sup> to be repacked such that they can be used with the ARC technology.<sup>9</sup>

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<sup>7</sup> See [https://developer.chrome.com/apps/getstarted\\_arc](https://developer.chrome.com/apps/getstarted_arc) for a brief overview of ARC.

<sup>8</sup> APK files contain all parts of an Android app in a single file, and can be run directly on the Android operating system.

Java SE 5;

145. I further conclude that Google copied the SSO for the 37 Java API Packages in Android Gingerbread (API Level 9) through Android Marshmallow (API Level 23).

146. I also conclude that Google copied 816 lines of declaring code from Java SE 6 and 223 lines of declaring code from Java SE 7 in Android Gingerbread (API Level 9) through Android Marshmallow (API Level 23).

147. Finally, I conclude that by enabling Android apps to be run on Chrome OS devices such as Chromebooks, Google has copied the declaring code and SSO of the 37 Java API Packages.

148. It is my understanding that discovery in this case is ongoing. Accordingly, I reserve the right to supplement or amend my opinions in light of any additional evidence, testimony, or information that may be provided to me after the date of this report. I also reserve the right to supplement or amend my opinions in response to any expert reports served by any party in the lawsuit.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on: January 8, 2016

A handwritten signature in black ink, appearing to read "Robert Zeidman", written over a horizontal line.

Robert Zeidman

# EXHIBIT V

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.awt.font	TextAttribute	Added Field	TextAttribute KERNING
API Level 09	java.awt.font	TextAttribute	Added Field	Integer KERNING_ON
API Level 09	java.awt.font	TextAttribute	Added Field	TextAttribute LIGATURES
API Level 09	java.awt.font	TextAttribute	Added Field	Integer LIGATURES_ON
API Level 09	java.awt.font	TextAttribute	Added Field	TextAttribute TRACKING
API Level 09	java.awt.font	TextAttribute	Added Field	Float TRACKING_LOOSE
API Level 09	java.awt.font	TextAttribute	Added Field	Float TRACKING_TIGHT
API Level 09	java.io	Console	Added Class	public final class Console extends Object implements Flushable
API Level 09	java.io	Console	Added Method	public char[] readPassword()
API Level 09	java.io	Console	Added Method	public char[] readPassword(String format, Object... args)
API Level 09	java.io	Console	Added Method	public Console format(String format, Object... args)
API Level 09	java.io	Console	Added Method	public Console printf(String format, Object... args)
API Level 09	java.io	Console	Added Method	public PrintWriter writer()
API Level 09	java.io	Console	Added Method	public Reader reader()
API Level 09	java.io	Console	Added Method	public String readLine()
API Level 09	java.io	Console	Added Method	public String readLine(String format, Object... args)
API Level 09	java.io	Console	Added Method	public void flush()
API Level 09	java.io	IOException	Added Error	public final class IOException extends Error
API Level 09	java.io	IOException	Added Constructor	public IOException (Throwable cause)
API Level 09	java.io	File	Added Method	boolean canExecute()
API Level 09	java.io	File	Added Method	long getFreeSpace()
API Level 09	java.io	File	Added Method	long getTotalSpace()
API Level 09	java.io	File	Added Method	long getUsableSpace()
API Level 09	java.io	File	Added Method	boolean setExecutable(boolean)
API Level 09	java.io	File	Added Method	boolean setExecutable(boolean, boolean)
API Level 09	java.io	File	Added Method	boolean setReadable(boolean)
API Level 09	java.io	File	Added Method	boolean setReadable(boolean, boolean)
API Level 09	java.io	File	Added Method	boolean setWritable(boolean)
API Level 09	java.io	File	Added Method	boolean setWritable(boolean, boolean)
API Level 09	java.io	IOException	Added Constructor	IOException(String, Throwable)
API Level 09	java.io	IOException	Added Constructor	IOException(Throwable)
API Level 09	java.io	ObjectStreamClass	Added Method	ObjectStreamClass lookupAny(Class<?>)
API Level 09	java.io	PipedInputStream	Added Constructor	PipedInputStream(int)
API Level 09	java.io	PipedInputStream	Added Constructor	PipedInputStream(PipedOutputStream, int)
API Level 09	java.io	PipedReader	Added Constructor	PipedReader(int)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.io	PipedReader	Added Constructor	PipedReader(PipedWriter, int)
API Level 09	java.io	PrintStream	Added Method	void clearError()
API Level 09	java.io	PrintWriter	Added Method	void clearError()
API Level 09	java.lang	Double	Added Field	int MAX_EXPONENT
API Level 09	java.lang	Double	Added Field	int MIN_EXPONENT
API Level 09	java.lang	Double	Added Field	double MIN_NORMAL
API Level 09	java.lang	Float	Added Field	int MAX_EXPONENT
API Level 09	java.lang	Float	Added Field	int MIN_EXPONENT
API Level 09	java.lang	Float	Added Field	float MIN_NORMAL
API Level 09	java.lang	Math	Added Method	double copySign(double, double)
API Level 09	java.lang	Math	Added Method	float copySign(float, float)
API Level 09	java.lang	Math	Added Method	int getExponent(double)
API Level 09	java.lang	Math	Added Method	int getExponent(float)
API Level 09	java.lang	Math	Added Method	double nextAfter(double, double)
API Level 09	java.lang	Math	Added Method	float nextAfter(float, double)
API Level 09	java.lang	Math	Added Method	double nextUp(double)
API Level 09	java.lang	Math	Added Method	float nextUp(float)
API Level 09	java.lang	Math	Added Method	double scalb(double, int)
API Level 09	java.lang	Math	Added Method	float scalb(float, int)
API Level 09	java.lang	StrictMath	Added Method	double copySign(double, double)
API Level 09	java.lang	StrictMath	Added Method	float copySign(float, float)
API Level 09	java.lang	StrictMath	Added Method	int getExponent(double)
API Level 09	java.lang	StrictMath	Added Method	int getExponent(float)
API Level 09	java.lang	StrictMath	Added Method	double nextAfter(double, double)
API Level 09	java.lang	StrictMath	Added Method	float nextAfter(float, double)
API Level 09	java.lang	StrictMath	Added Method	double nextUp(double)
API Level 09	java.lang	StrictMath	Added Method	float nextUp(float)
API Level 09	java.lang	StrictMath	Added Method	double scalb(double, int)
API Level 09	java.lang	StrictMath	Added Method	float scalb(float, int)
API Level 09	java.lang	String	Added Constructor	String(byte[], int, int, Charset)
API Level 09	java.lang	String	Added Constructor	String(byte[], Charset)
API Level 09	java.lang	String	Added Method	byte[] getBytes(Charset)
API Level 09	java.lang	String	Added Method	boolean isEmpty()
API Level 09	java.lang	System	Added Method	Console console()
API Level 09	java.net	CookieManager	Added Class	public class CookieManager extends CookieHandler

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.net	CookieManager	Added Constructor	public CookieManager ()
API Level 09	java.net	CookieManager	Added Constructor	public CookieManager (CookieStore store, CookiePolicy cookiePolicy)
API Level 09	java.net	CookieManager	Added Method	public CookieStore getCookieStore()
API Level 09	java.net	CookieManager	Added Method	public Map<String, List<String>> get(Uri uri, Map<String, List<String>> requestHeaders)
API Level 09	java.net	CookieManager	Added Method	public void put(Uri uri, Map<String, List<String>> responseHeaders)
API Level 09	java.net	CookieManager	Added Method	public void setCookiePolicy(CookiePolicy cookiePolicy)
API Level 09	java.net	CookiePolicy	Added Interface	public interface CookiePolicy
API Level 09	java.net	CookieStore	Added Interface	public interface CookieStore
API Level 09	java.net	HttpCookie	Added Class	public final class HttpCookie extends Object implements Cloneable
API Level 09	java.net	HttpCookie	Added Constructor	public HttpCookie (String name, String value)
API Level 09	java.net	HttpCookie	Added Method	public boolean equals(Object object)
API Level 09	java.net	HttpCookie	Added Method	public boolean getDiscard()
API Level 09	java.net	HttpCookie	Added Method	public boolean getSecure()
API Level 09	java.net	HttpCookie	Added Method	public boolean hasExpired()
API Level 09	java.net	HttpCookie	Added Method	public int getVersion()
API Level 09	java.net	HttpCookie	Added Method	public int hashCode()
API Level 09	java.net	HttpCookie	Added Method	public long getMaxAge()
API Level 09	java.net	HttpCookie	Added Method	public Object clone()
API Level 09	java.net	HttpCookie	Added Method	public static boolean domainMatches(String domainPattern, String host)
API Level 09	java.net	HttpCookie	Added Method	public static List<HttpCookie> parse(String header)
API Level 09	java.net	HttpCookie	Added Method	public String getComment()
API Level 09	java.net	HttpCookie	Added Method	public String getCommentURL()
API Level 09	java.net	HttpCookie	Added Method	public String getDomain()
API Level 09	java.net	HttpCookie	Added Method	public String getName()
API Level 09	java.net	HttpCookie	Added Method	public String getPath()
API Level 09	java.net	HttpCookie	Added Method	public String getPortlist()
API Level 09	java.net	HttpCookie	Added Method	public String getValue()
API Level 09	java.net	HttpCookie	Added Method	public String toString()
API Level 09	java.net	HttpCookie	Added Method	public void setComment(String comment)
API Level 09	java.net	HttpCookie	Added Method	public void setCommentURL(String commentURL)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.net	HttpCookie	Added Method	public void setDiscard(boolean discard)
API Level 09	java.net	HttpCookie	Added Method	public void setDomain(String pattern)
API Level 09	java.net	HttpCookie	Added Method	public void setMaxAge(long deltaSeconds)
API Level 09	java.net	HttpCookie	Added Method	public void setPath(String path)
API Level 09	java.net	HttpCookie	Added Method	public void setPortlist(String portList)
API Level 09	java.net	HttpCookie	Added Method	public void setSecure(boolean secure)
API Level 09	java.net	HttpCookie	Added Method	public void setValue(String value)
API Level 09	java.net	HttpCookie	Added Method	public void setVersion(int newVersion)
API Level 09	java.net	IDN	Added Class	public final class IDN extends Object
API Level 09	java.net	IDN	Added Field	public static final int ALLOW_UNASSIGNED
API Level 09	java.net	IDN	Added Field	public static final int USE_STD3_ASCII_RULES
API Level 09	java.net	IDN	Added Method	public static String toASCII (String input)
API Level 09	java.net	IDN	Added Method	public static String toASCII (String input, int flags)
API Level 09	java.net	IDN	Added Method	public static String toUnicode (String input, int flags)
API Level 09	java.net	IDN	Added Method	public static String toUnicode (String input)
API Level 09	java.net	InterfaceAddress	Added Class	public class InterfaceAddress extends Object
API Level 09	java.net	InterfaceAddress	Added Method	public boolean equals (Object obj)
API Level 09	java.net	InterfaceAddress	Added Method	public InetAddress getAddress ()
API Level 09	java.net	InterfaceAddress	Added Method	public InetAddress getBroadcast ()
API Level 09	java.net	InterfaceAddress	Added Method	public short getNetworkPrefixLength ()
API Level 09	java.net	InterfaceAddress	Added Method	public int hashCode ()
API Level 09	java.net	InterfaceAddress	Added Method	public String toString ()
API Level 09	java.net	NetworkInterface	Added Method	byte[] getHardwareAddress()
API Level 09	java.net	NetworkInterface	Added Method	List<InterfaceAddress> getInterfaceAddresses()
API Level 09	java.net	NetworkInterface	Added Method	int getMTU()
API Level 09	java.net	NetworkInterface	Added Method	NetworkInterface getParent()
API Level 09	java.net	NetworkInterface	Added Method	Enumeration<NetworkInterface> getSubInterfaces()
API Level 09	java.net	NetworkInterface	Added Method	boolean isLoopback()
API Level 09	java.net	NetworkInterface	Added Method	boolean isPointToPoint()
API Level 09	java.net	NetworkInterface	Added Method	boolean isUp()
API Level 09	java.net	NetworkInterface	Added Method	boolean isVirtual()
API Level 09	java.net	NetworkInterface	Added Method	boolean supportsMulticast()
API Level 09	java.nio	Buffer	Added Method	Object array()
API Level 09	java.nio	Buffer	Added Method	int arrayOffset()
API Level 09	java.nio	Buffer	Added Method	boolean hasArray()



API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.nio	Buffer	Added Method	boolean isDirect()
API Level 09	java.security	Policy.Parameters	Added Interface	public static interface Policy.Parameters
API Level 09	java.security	PolicySpi	Added Class	public abstract class PolicySpi extends Object
API Level 09	java.security	PolicySpi	Added Method	public PolicySpi ()
API Level 09	java.security	PolicySpi	Added Method	protected PermissionCollection engineGetPermissions (CodeSource codesource)
API Level 09	java.security	PolicySpi	Added Method	protected PermissionCollection engineGetPermissions (ProtectionDomain domain)
API Level 09	java.security	PolicySpi	Added Method	protected abstract boolean engineImplies (ProtectionDomain domain, Permission permission)
API Level 09	java.security	PolicySpi	Added Method	protected void engineRefresh ()
API Level 09	java.security	AccessController	Added Method	T doPrivilegedWithCombiner(PrivilegedExceptionAction<T>)
API Level 09	java.security	AccessController	Added Method	T doPrivilegedWithCombiner(PrivilegedAction<T>)
API Level 09	java.security	Policy	Added Method	Policy getInstance(String, Parameters)
API Level 09	java.security	Policy	Added Method	Policy getInstance(String, Parameters, Provider)
API Level 09	java.security	Policy	Added Method	Policy getInstance(String, Parameters, String)
API Level 09	java.security	Policy	Added Method	Parameters getParameters()
API Level 09	java.security	Policy	Added Method	Provider getProvider()
API Level 09	java.security	Policy	Added Method	String getType()
API Level 09	java.security	UnrecoverableKeyException	Modified Class	public class UnrecoverableKeyException extends UnrecoverableEntryException
API Level 09	java.sql	ClientInfoStatus	Added Enum	public final enum ClientInfoStatus
API Level 09	java.sql	NClob	Added Interface	public interface Nclob implements Clob
API Level 09	java.sql	RowId	Added Interface	public interface RowId
API Level 09	java.sql	RowIdLifetime	Added Enum	public final enum RowIdLifetime extends Enum<RowIdLifetime>
API Level 09	java.sql	SQLClientInfoException	Added Exception	public class SQLClientInfoException extends SQLException
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(Map<String, ClientInfoStatus> failedProperties)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(Map<String, ClientInfoStatus> failedProperties, Throwable cause)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(String reason, Map<String, ClientInfoStatus> failedProperties)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(String reason, Map<String, ClientInfoStatus> failedProperties, Throwable cause)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(String reason, String sqlState, int vendorCode, Map<String, ClientInfoStatus> failedProperties)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(String reason, String sqlState, int vendorCode, Map<String, ClientInfoStatus> failedProperties, Throwable cause)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(String reason, String sqlState, Map<String, ClientInfoStatus> failedProperties)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException(String reason, String sqlState, Map<String, ClientInfoStatus> failedProperties, Throwable cause)
API Level 09	java.sql	SQLClientInfoException	Added Constructor	public SQLClientInfoException()
API Level 09	java.sql	SQLClientInfoException	Added Method	public Map<String, ClientInfoStatus> getFailedProperties ()
API Level 09	java.sql	SQLDataException	Added Exception	public class SQLDataException extends SQLNonTransientException
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(String reason)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(String reason, String sqlState)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(String reason, Throwable cause)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException(Throwable cause)
API Level 09	java.sql	SQLDataException	Added Constructor	public SQLDataException()
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Exception	public class SQLFeatureNotSupportedException extends SQLNonTransientException
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(String reason)
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(String reason, String sqlState)
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(String reason, String sqlState, int vendorCode, Throwable cause)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(String reason, Throwable cause)
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException(Throwable cause)
API Level 09	java.sql	SQLFeatureNotSupportedException	Added Constructor	public SQLFeatureNotSupportedException()
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Exception	public class SQLIntegrityConstraintViolationException extends SQLNonTransientException
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(String reason)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(String reason, String sqlState)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(String reason, Throwable cause)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException(Throwable cause)
API Level 09	java.sql	SQLIntegrityConstraintViolationException	Added Constructor	public SQLIntegrityConstraintViolationException()
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Exception	public class SQLInvalidAuthorizationSpecException extends SQLNonTransientException
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(String reason)
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(String reason, String sqlState)
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(String reason, Throwable cause)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException(Throwable cause)
API Level 09	java.sql	SQLInvalidAuthorizationSpecException	Added Constructor	public SQLInvalidAuthorizationSpecException()
API Level 09	java.sql	SQLNonTransientConnectionException	Added Exception	public class SQLNonTransientConnectionException extends SQLNonTransientException
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(String reason)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(String reason, String sqlState)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(String reason, Throwable cause)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException(Throwable cause)
API Level 09	java.sql	SQLNonTransientConnectionException	Added Constructor	public SQLNonTransientConnectionException()
API Level 09	java.sql	SQLNonTransientException	Added Exception	public class SQLNonTransientException extends SQLException
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(String reason)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(String reason, String sqlState)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(String reason, Throwable cause)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException(Throwable cause)
API Level 09	java.sql	SQLNonTransientException	Added Constructor	public SQLNonTransientException()
API Level 09	java.sql	SQLRecoverableException	Added Exception	public class SQLRecoverableException extends SQLException
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException()
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(String reason)
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(String reason, String sqlState)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(String reason, String sqlState, int vendorCode, Throwable cause) SQLSyntaxErrorException()
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(String reason, Throwable cause)
API Level 09	java.sql	SQLRecoverableException	Added Constructor	public SQLRecoverableException(Throwable cause)
API Level 09	java.sql	SQLSyntaxErrorException	Added Exception	public class SQLSyntaxErrorException extends SQLNonTransientException
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(String reason)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(String reason, String sqlState)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(String reason, Throwable cause)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException(Throwable cause)
API Level 09	java.sql	SQLSyntaxErrorException	Added Constructor	public SQLSyntaxErrorException()
API Level 09	java.sql	SQLTimeoutException	Added Exception	public class SQLTimeoutException extends SQLTransientException
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException()
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException(String reason)
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException(String reason, String sqlState)
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLTimeoutException	Added Constructor	public SQLTimeoutException(String reason, Throwable cause)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(Throwable cause)
API Level 09	java.sql	SQLException	Added Exception	public class SQLException extends RuntimeException
API Level 09	java.sql	SQLException	Added Constructor	public SQLException()
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(String reason)
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(String reason, String sqlState)
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(String reason, Throwable cause)
API Level 09	java.sql	SQLException	Added Constructor	public SQLException(Throwable cause)
API Level 09	java.sql	SQLTransientConnectionException	Added Exception	public class SQLTransientConnectionException extends RuntimeException
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException()
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(String reason)
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(String reason, String sqlState)
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(String reason, Throwable cause)
API Level 09	java.sql	SQLTransientConnectionException	Added Constructor	public SQLTransientConnectionException(Throwable cause)
API Level 09	java.sql	SQLTransientException	Added Exception	public class SQLTransientException extends RuntimeException
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException() SQLException()
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(String reason)



API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(String reason, String sqlState)
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(String reason, String sqlState, int vendorCode)
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(String reason, String sqlState, int vendorCode, Throwable cause)
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(String reason, String sqlState, Throwable cause)
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(String reason, Throwable cause)
API Level 09	java.sql	SQLTransientException	Added Constructor	public SQLTransientException(Throwable cause)
API Level 09	java.sql	SQLXML	Added Interface	public interface SQLXML
API Level 09	java.sql	Wrapper	Added Interface	public interface Wrapper
API Level 09	java.sql	Array	Added Method	void free()
API Level 09	java.sql	BatchUpdateException	Added Constructor	BatchUpdateException(int[], Throwable)
API Level 09	java.sql	BatchUpdateException	Added Constructor	BatchUpdateException(String, int[], Throwable)
API Level 09	java.sql	BatchUpdateException	Added Constructor	BatchUpdateException(String, String, int, int[], Throwable)
API Level 09	java.sql	BatchUpdateException	Added Constructor	BatchUpdateException(String, String, int[], Throwable)
API Level 09	java.sql	BatchUpdateException	Added Constructor	BatchUpdateException(Throwable)
API Level 09	java.sql	Blob	Added Method	void free()
API Level 09	java.sql	Blob	Added Method	InputStream getBinaryStream(long, long)
API Level 09	java.sql	CallableStatement	Added Method	Reader getCharacterStream(int)
API Level 09	java.sql	CallableStatement	Added Method	Reader getCharacterStream(String)
API Level 09	java.sql	CallableStatement	Added Method	Reader getNCharacterStream(int)
API Level 09	java.sql	CallableStatement	Added Method	Reader getNCharacterStream(String)
API Level 09	java.sql	CallableStatement	Added Method	NClob getNClob(int)
API Level 09	java.sql	CallableStatement	Added Method	NClob getNClob(String)
API Level 09	java.sql	CallableStatement	Added Method	String getNString(int)
API Level 09	java.sql	CallableStatement	Added Method	String getNString(String)
API Level 09	java.sql	CallableStatement	Added Method	RowId getRowId(int)
API Level 09	java.sql	CallableStatement	Added Method	RowId getRowId(String)
API Level 09	java.sql	CallableStatement	Added Method	SQLXML getSQLXML(int)
API Level 09	java.sql	CallableStatement	Added Method	SQLXML getSQLXML(String)
API Level 09	java.sql	CallableStatement	Added Method	void setAsciiStream(String, InputStream)
API Level 09	java.sql	CallableStatement	Added Method	void setAsciiStream(String, InputStream, long)
API Level 09	java.sql	CallableStatement	Added Method	void setBinaryStream(String, InputStream)
API Level 09	java.sql	CallableStatement	Added Method	void setBinaryStream(String, InputStream, long)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	CallableStatement	Added Method	void setBlob(String, InputStream)
API Level 09	java.sql	CallableStatement	Added Method	void setBlob(String, InputStream, long)
API Level 09	java.sql	CallableStatement	Added Method	void setBlob(String, Blob)
API Level 09	java.sql	CallableStatement	Added Method	void setCharacterStream(String, Reader)
API Level 09	java.sql	CallableStatement	Added Method	void setCharacterStream(String, Reader, long)
API Level 09	java.sql	CallableStatement	Added Method	void setClob(String, Reader)
API Level 09	java.sql	CallableStatement	Added Method	void setClob(String, Reader, long)
API Level 09	java.sql	CallableStatement	Added Method	void setClob(String, Clob)
API Level 09	java.sql	CallableStatement	Added Method	void setNCharacterStream(String, Reader)
API Level 09	java.sql	CallableStatement	Added Method	void setNCharacterStream(String, Reader, long)
API Level 09	java.sql	CallableStatement	Added Method	void setNClob(String, Reader)
API Level 09	java.sql	CallableStatement	Added Method	void setNClob(String, Reader, long)
API Level 09	java.sql	CallableStatement	Added Method	void setNClob(String, NClob)
API Level 09	java.sql	CallableStatement	Added Method	void setNString(String, String)
API Level 09	java.sql	CallableStatement	Added Method	void setRowId(String, RowId)
API Level 09	java.sql	CallableStatement	Added Method	void setSQLXML(String, SQLXML)
API Level 09	java.sql	Clob	Added Method	void free()
API Level 09	java.sql	Clob	Added Method	Reader getCharacterStream(long, long)
API Level 09	java.sql	Connection	Added Method	Array createArrayOf(String, Object[])
API Level 09	java.sql	Connection	Added Method	Blob createBlob()
API Level 09	java.sql	Connection	Added Method	Clob createClob()
API Level 09	java.sql	Connection	Added Method	NClob createNClob()
API Level 09	java.sql	Connection	Added Method	SQLXML createSQLXML()
API Level 09	java.sql	Connection	Added Method	Struct createStruct(String, Object[])
API Level 09	java.sql	Connection	Added Method	String getClientInfo(String)
API Level 09	java.sql	Connection	Added Method	Properties getClientInfo()
API Level 09	java.sql	Connection	Added Method	boolean isValid(int)
API Level 09	java.sql	Connection	Added Method	void setClientInfo(String, String)
API Level 09	java.sql	Connection	Added Method	void setClientInfo(Properties)
API Level 09	java.sql	DataTruncation	Added Constructor	DataTruncation(int, boolean, boolean, int, int, Throwable)
API Level 09	java.sql	DatabaseMetaData	Added Method	boolean autoCommitFailureClosesAllResultSets()
API Level 09	java.sql	DatabaseMetaData	Added Method	ResultSet getClientInfoProperties()
API Level 09	java.sql	DatabaseMetaData	Added Method	ResultSet getFunctionColumns(String, String, String, String)
API Level 09	java.sql	DatabaseMetaData	Added Method	ResultSet getFunctions(String, String, String)
API Level 09	java.sql	DatabaseMetaData	Added Method	RowIdLifetime getRowIdLifetime()



API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	DatabaseMetaData	Added Method	ResultSet getSchemas(String, String)
API Level 09	java.sql	DatabaseMetaData	Added Method	boolean supportsStoredFunctionsUsingCallSyntax()
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionColumnIn
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionColumnInOut
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionColumnOut
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionColumnResult
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionColumnUnknown
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionNoNulls
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionNoTable
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionNullable
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionNullableUnknown
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionResultUnknown
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionReturn
API Level 09	java.sql	DatabaseMetaData	Added Field	int functionReturnsTable
API Level 09	java.sql	DatabaseMetaData	Added Field	int sqlStateSQL
API Level 09	java.sql	PreparedStatement	Added Method	void setAsciiStream(int, InputStream)
API Level 09	java.sql	PreparedStatement	Added Method	void setAsciiStream(int, InputStream, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setBinaryStream(int, InputStream)
API Level 09	java.sql	PreparedStatement	Added Method	void setBinaryStream(int, InputStream, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setBlob(int, InputStream)
API Level 09	java.sql	PreparedStatement	Added Method	void setBlob(int, InputStream, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setCharacterStream(int, Reader)
API Level 09	java.sql	PreparedStatement	Added Method	void setCharacterStream(int, Reader, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setClob(int, Reader)
API Level 09	java.sql	PreparedStatement	Added Method	void setClob(int, Reader, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setNCharacterStream(int, Reader)
API Level 09	java.sql	PreparedStatement	Added Method	void setNCharacterStream(int, Reader, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setNClob(int, Reader)
API Level 09	java.sql	PreparedStatement	Added Method	void setNClob(int, Reader, long)
API Level 09	java.sql	PreparedStatement	Added Method	void setNClob(int, NClob)
API Level 09	java.sql	PreparedStatement	Added Method	void setNString(int, String)
API Level 09	java.sql	PreparedStatement	Added Method	void setRowId(int, RowId)
API Level 09	java.sql	PreparedStatement	Added Method	void setSQLXML(int, SQLXML)
API Level 09	java.sql	ResultSet	Added Method	int getHoldability()
API Level 09	java.sql	ResultSet	Added Method	Reader getNCharacterStream(int)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	ResultSet	Added Method	Reader getNCharacterStream(String)
API Level 09	java.sql	ResultSet	Added Method	NClob getNClob(int)
API Level 09	java.sql	ResultSet	Added Method	NClob getNClob(String)
API Level 09	java.sql	ResultSet	Added Method	String getNString(int)
API Level 09	java.sql	ResultSet	Added Method	String getNString(String)
API Level 09	java.sql	ResultSet	Added Method	RowId getRowId(int)
API Level 09	java.sql	ResultSet	Added Method	RowId getRowId(String)
API Level 09	java.sql	ResultSet	Added Method	SQLXML getSQLXML(int)
API Level 09	java.sql	ResultSet	Added Method	SQLXML getSQLXML(String)
API Level 09	java.sql	ResultSet	Added Method	boolean isClosed()
API Level 09	java.sql	ResultSet	Added Method	void updateAsciiStream(int, InputStream)
API Level 09	java.sql	ResultSet	Added Method	void updateAsciiStream(int, InputStream, long)
API Level 09	java.sql	ResultSet	Added Method	void updateAsciiStream(String, InputStream)
API Level 09	java.sql	ResultSet	Added Method	void updateAsciiStream(String, InputStream, long)
API Level 09	java.sql	ResultSet	Added Method	void updateBinaryStream(int, InputStream)
API Level 09	java.sql	ResultSet	Added Method	void updateBinaryStream(int, InputStream, long)
API Level 09	java.sql	ResultSet	Added Method	void updateBinaryStream(String, InputStream)
API Level 09	java.sql	ResultSet	Added Method	void updateBinaryStream(String, InputStream, long)
API Level 09	java.sql	ResultSet	Added Method	void updateBlob(int, InputStream)
API Level 09	java.sql	ResultSet	Added Method	void updateBlob(int, InputStream, long)
API Level 09	java.sql	ResultSet	Added Method	void updateBlob(String, InputStream)
API Level 09	java.sql	ResultSet	Added Method	void updateBlob(String, InputStream, long)
API Level 09	java.sql	ResultSet	Added Method	void updateCharacterStream(int, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateCharacterStream(int, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateCharacterStream(String, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateCharacterStream(String, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateClob(int, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateClob(int, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateClob(String, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateClob(String, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateNCharacterStream(int, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateNCharacterStream(int, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateNCharacterStream(String, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateNCharacterStream(String, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateNClob(int, Reader)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.sql	ResultSet	Added Method	void updateNClob(int, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateNClob(int, NClob)
API Level 09	java.sql	ResultSet	Added Method	void updateNClob(String, Reader)
API Level 09	java.sql	ResultSet	Added Method	void updateNClob(String, Reader, long)
API Level 09	java.sql	ResultSet	Added Method	void updateNClob(String, NClob)
API Level 09	java.sql	ResultSet	Added Method	void updateNString(int, String)
API Level 09	java.sql	ResultSet	Added Method	void updateNString(String, String)
API Level 09	java.sql	ResultSet	Added Method	void updateRowId(int, RowId)
API Level 09	java.sql	ResultSet	Added Method	void updateRowId(String, RowId)
API Level 09	java.sql	ResultSet	Added Method	void updateSQLXML(int, SQLXML)
API Level 09	java.sql	ResultSet	Added Method	void updateSQLXML(String, SQLXML)
API Level 09	java.sql	SQLException	Modified Interface	public class SQLException extends Exception implements Serializable, Iterable<Throwable>
API Level 09	java.sql	SQLException	Added Constructor	SQLException(String, String, int, Throwable)
API Level 09	java.sql	SQLException	Added Constructor	SQLException(String, String, Throwable)
API Level 09	java.sql	SQLException	Added Constructor	SQLException(String, Throwable)
API Level 09	java.sql	SQLException	Added Constructor	SQLException(Throwable)
API Level 09	java.sql	SQLException	Added Method	Iterator<Throwable> iterator()
API Level 09	java.sql	SQLInput	Added Method	NClob readNClob()
API Level 09	java.sql	SQLInput	Added Method	String readNString()
API Level 09	java.sql	SQLInput	Added Method	RowId readRowId()
API Level 09	java.sql	SQLInput	Added Method	SQLXML readSQLXML()
API Level 09	java.sql	SQLOutput	Added Method	void writeNClob(NClob)
API Level 09	java.sql	SQLOutput	Added Method	void writeNString(String)
API Level 09	java.sql	SQLOutput	Added Method	void writeRowId(RowId)
API Level 09	java.sql	SQLOutput	Added Method	void writeSQLXML(SQLXML)
API Level 09	java.sql	Statement	Added Method	boolean isClosed()
API Level 09	java.sql	Statement	Added Method	boolean isPoolable()
API Level 09	java.sql	Statement	Added Method	void setPoolable(boolean)
API Level 09	java.sql	Types	Added Field	int LONGNVARCHAR
API Level 09	java.sql	Types	Added Field	int NCHAR
API Level 09	java.sql	Types	Added Field	int NCLOB
API Level 09	java.sql	Types	Added Field	int NVARCHAR
API Level 09	java.sql	Types	Added Field	int ROWID
API Level 09	java.sql	Types	Added Field	int SQLXML

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.text	Normalizer	Added Class	public final class Normalizer
API Level 09	java.text	Normalizer	Added Method	public static boolean isNormalized (CharSequence src, Normalizer.Form form)
API Level 09	java.text	Normalizer	Added Method	public static String normalize (CharSequence src, Normalizer.Form form)
API Level 09	java.text	Normalizer.Form	Added Enum	public final class Normalizer.Form extends Enum<Normalizer.Form>
API Level 09	java.text	BreakIterator	Removed Method	int getInt(byte[], int)
API Level 09	java.text	BreakIterator	Removed Method	long getLong(byte[], int)
API Level 09	java.text	BreakIterator	Removed Method	short getShort(byte[], int)
API Level 09	java.text	CollationKey	Added Constructor	CollationKey(String)
API Level 09	java.text	CollationKey	Modified Method	abstract int compareTo(CollationKey)
API Level 09	java.text	CollationKey	Modified Method	abstract byte[] toByteArray()
API Level 09	java.text	DateFormatSymbols	Added Method	Locale[] getAvailableLocales()
API Level 09	java.text	DateFormatSymbols	Added Method	DateFormatSymbols getInstance()
API Level 09	java.text	DateFormatSymbols	Added Method	DateFormatSymbols getInstance(Locale)
API Level 09	java.text	DecimalFormatSymbols	Added Method	Locale[] getAvailableLocales()
API Level 09	java.text	DecimalFormatSymbols	Added Method	String getExponentSeparator()
API Level 09	java.text	DecimalFormatSymbols	Added Method	DecimalFormatSymbols getInstance()
API Level 09	java.text	DecimalFormatSymbols	Added Method	DecimalFormatSymbols getInstance(Locale)
API Level 09	java.text	DecimalFormatSymbols	Added Method	void setExponentSeparator(String)
API Level 09	java.text	Format	Modified Constructor	protected Format()
API Level 09	java.text	NumberFormat	Modified Constructor	protected NumberFormat()
API Level 09	java.text	NumberFormat	Modified Method	RoundingMode getRoundingMode()
API Level 09	java.text	NumberFormat	Modified Method	void setRoundingMode(RoundingMode)
API Level 09	java.util	AbstractMap.SimpleEntry	Added Class	public static class AbstractMap.SimpleEntry extends Object implements Entry<K, V>, Serializable
API Level 09	java.util	AbstractMap.SimpleEntry	Added Constructor	public AbstractMap.SimpleEntry(K theKey, V theValue)
API Level 09	java.util	AbstractMap.SimpleEntry	Added Constructor	public AbstractMap.SimpleEntry(Entry<? extends K, ? extends V> copyFrom)
API Level 09	java.util	AbstractMap.SimpleEntry	Added Method	public boolean equals(Object object)
API Level 09	java.util	AbstractMap.SimpleEntry	Added Method	public int hashCode()
API Level 09	java.util	AbstractMap.SimpleEntry	Added Method	public K getKey()
API Level 09	java.util	AbstractMap.SimpleEntry	Added Method	public String toString()
API Level 09	java.util	AbstractMap.SimpleEntry	Added Method	public V getValue()

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	AbstractMap.SimpleEntry	Added Method	public V setValue(V object)
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Class	public static class AbstractMap.SimpleImmutableEntry extends Object implements Entry<K, V>, Serializable
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Constructor	public AbstractMap.SimpleImmutableEntry(K theKey, V theValue)
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Constructor	public AbstractMap.SimpleImmutableEntry(Entry<? extends K, ? extends V> copyFrom)
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Method	public boolean equals(Object object)
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Method	public int hashCode()
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Method	public K getKey()
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Method	public String toString()
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Method	public V getValue()
API Level 09	java.util	AbstractMap.SimpleImmutableEntry	Added Method	public V setValue(V object)
API Level 09	java.util	ArrayDeque	Added Class	public class ArrayDeque<E> extends AbstractCollection<E> implements Deque<E>, Cloneable, Serializable
API Level 09	java.util	ArrayDeque	Added Constructor	public ArrayDeque()
API Level 09	java.util	ArrayDeque	Added Constructor	public ArrayDeque(Collection<? extends E> c)
API Level 09	java.util	ArrayDeque	Added Constructor	public ArrayDeque(int numElements)
API Level 09	java.util	ArrayDeque	Added Method	public <T> T[] toArray(T[] a)
API Level 09	java.util	ArrayDeque	Added Method	public ArrayDeque<E> clone()
API Level 09	java.util	ArrayDeque	Added Method	public boolean add(E e)
API Level 09	java.util	ArrayDeque	Added Method	public boolean contains(Object o)
API Level 09	java.util	ArrayDeque	Added Method	public boolean isEmpty()
API Level 09	java.util	ArrayDeque	Added Method	public boolean offer(E e)
API Level 09	java.util	ArrayDeque	Added Method	public boolean offerFirst(E e)
API Level 09	java.util	ArrayDeque	Added Method	public boolean offerLast(E e)
API Level 09	java.util	ArrayDeque	Added Method	public boolean remove(Object o)
API Level 09	java.util	ArrayDeque	Added Method	public boolean removeFirstOccurrence(Object o)
API Level 09	java.util	ArrayDeque	Added Method	public boolean removeLastOccurrence(Object o)
API Level 09	java.util	ArrayDeque	Added Method	public E element()
API Level 09	java.util	ArrayDeque	Added Method	public E getFirst()
API Level 09	java.util	ArrayDeque	Added Method	public E getLast()
API Level 09	java.util	ArrayDeque	Added Method	public E peek()
API Level 09	java.util	ArrayDeque	Added Method	public E peekFirst()
API Level 09	java.util	ArrayDeque	Added Method	public E peekLast()

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	ArrayDeque	Added Method	public E poll()
API Level 09	java.util	ArrayDeque	Added Method	public E pollFirst()
API Level 09	java.util	ArrayDeque	Added Method	public E pollLast()
API Level 09	java.util	ArrayDeque	Added Method	public E pop()
API Level 09	java.util	ArrayDeque	Added Method	public E remove()
API Level 09	java.util	ArrayDeque	Added Method	public E removeFirst()
API Level 09	java.util	ArrayDeque	Added Method	public E removeLast()
API Level 09	java.util	ArrayDeque	Added Method	public int size()
API Level 09	java.util	ArrayDeque	Added Method	public Iterator<E> descendingIterator()
API Level 09	java.util	ArrayDeque	Added Method	public Iterator<E> iterator()
API Level 09	java.util	ArrayDeque	Added Method	public Object[] toArray()
API Level 09	java.util	ArrayDeque	Added Method	public void addFirst(E e)
API Level 09	java.util	ArrayDeque	Added Method	public void addLast(E e)
API Level 09	java.util	ArrayDeque	Added Method	public void clear()
API Level 09	java.util	ArrayDeque	Added Method	public void push(E e)
API Level 09	java.util	Deque	Added Interface	public interface Deque<E> extends Queue<E>
API Level 09	java.util	Deque	Added Method	public abstract boolean add(E e)
API Level 09	java.util	Deque	Added Method	public abstract boolean contains(Object o)
API Level 09	java.util	Deque	Added Method	public abstract boolean offer(E e)
API Level 09	java.util	Deque	Added Method	public abstract boolean offerFirst(E e)
API Level 09	java.util	Deque	Added Method	public abstract boolean offerLast(E e)
API Level 09	java.util	Deque	Added Method	public abstract boolean remove(Object o)
API Level 09	java.util	Deque	Added Method	public abstract boolean removeFirstOccurrence(Object o)
API Level 09	java.util	Deque	Added Method	public abstract boolean removeLastOccurrence(Object o)
API Level 09	java.util	Deque	Added Method	public abstract E element()
API Level 09	java.util	Deque	Added Method	public abstract E getFirst()
API Level 09	java.util	Deque	Added Method	public abstract E getLast()
API Level 09	java.util	Deque	Added Method	public abstract E peek()
API Level 09	java.util	Deque	Added Method	public abstract E peekFirst()
API Level 09	java.util	Deque	Added Method	public abstract E peekLast()
API Level 09	java.util	Deque	Added Method	public abstract E poll()
API Level 09	java.util	Deque	Added Method	public abstract E pollFirst()
API Level 09	java.util	Deque	Added Method	public abstract E pollLast()
API Level 09	java.util	Deque	Added Method	public abstract E pop()
API Level 09	java.util	Deque	Added Method	public abstract E remove()



API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	Deque	Added Method	public abstract E removeFirst()
API Level 09	java.util	Deque	Added Method	public abstract E removeLast()
API Level 09	java.util	Deque	Added Method	public abstract int size()
API Level 09	java.util	Deque	Added Method	public abstract Iterator<E> descendingIterator()
API Level 09	java.util	Deque	Added Method	public abstract Iterator<E> iterator()
API Level 09	java.util	Deque	Added Method	public abstract void addFirst(E e)
API Level 09	java.util	Deque	Added Method	public abstract void addLast(E e)
API Level 09	java.util	Deque	Added Method	public abstract void push(E e)
API Level 09	java.util	NavigableMap	Added Interface	public interface NavigableMap<K,V> extends SortedMap<K,V>
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> ceilingEntry(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> firstEntry()
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> floorEntry(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> higherEntry(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> lastEntry()
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> lowerEntry(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> pollFirstEntry()
API Level 09	java.util	NavigableMap	Added Method	public abstract Entry<K, V> pollLastEntry()
API Level 09	java.util	NavigableMap	Added Method	public abstract K ceilingKey(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract K floorKey(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract K higherKey(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract K lowerKey(K key)
API Level 09	java.util	NavigableMap	Added Method	public abstract NavigableMap<K, V> descendingMap()
API Level 09	java.util	NavigableMap	Added Method	public abstract NavigableMap<K, V> headMap(K toKey, boolean inclusive)
API Level 09	java.util	NavigableMap	Added Method	public abstract NavigableMap<K, V> subMap(K fromKey, boolean fromInclusive, K toKey, boolean toInclusive)
API Level 09	java.util	NavigableMap	Added Method	abstract NavigableMap<K, V> tailMap(K fromKey, boolean inclusive)
API Level 09	java.util	NavigableMap	Added Method	public abstract NavigableSet<K> descendingKeySet()
API Level 09	java.util	NavigableMap	Added Method	public abstract NavigableSet<K> navigableKeySet()
API Level 09	java.util	NavigableMap	Added Method	public abstract SortedMap<K, V> headMap(K toKey)
API Level 09	java.util	NavigableMap	Added Method	public abstract SortedMap<K, V> subMap(K fromKey, K toKey)
API Level 09	java.util	NavigableMap	Added Method	public abstract SortedMap<K, V> tailMap(K fromKey)
API Level 09	java.util	NavigableSet	Added Interface	public interface NavigableSet<E> extends SortedSet<E>
API Level 09	java.util	NavigableSet	Added Method	public abstract E ceiling(E e)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	NavigableSet	Added Method	public abstract E floor(E e)
API Level 09	java.util	NavigableSet	Added Method	public abstract E higher(E e)
API Level 09	java.util	NavigableSet	Added Method	public abstract E lower(E e)
API Level 09	java.util	NavigableSet	Added Method	public abstract E pollFirst()
API Level 09	java.util	NavigableSet	Added Method	public abstract E pollLast()
API Level 09	java.util	NavigableSet	Added Method	public abstract Iterator<E> descendingIterator()
API Level 09	java.util	NavigableSet	Added Method	abstract Iterator<E> iterator()
API Level 09	java.util	NavigableSet	Added Method	public abstract NavigableSet<E> descendingSet()
API Level 09	java.util	NavigableSet	Added Method	public abstract NavigableSet<E> headSet(E toElement, boolean inclusive)
API Level 09	java.util	NavigableSet	Added Method	public abstract NavigableSet<E> subSet(E fromElement, boolean fromInclusive, E toElement, boolean toInclusive)
API Level 09	java.util	NavigableSet	Added Method	public abstract NavigableSet<E> tailSet(E fromElement, boolean inclusive)
API Level 09	java.util	NavigableSet	Added Method	public abstract SortedSet<E> headSet(E toElement)
API Level 09	java.util	NavigableSet	Added Method	public abstract SortedSet<E> subSet(E fromElement, E toElement)
API Level 09	java.util	NavigableSet	Added Method	public abstract SortedSet<E> tailSet(E fromElement)
API Level 09	java.util	ResourceBundle.Control	Added Class	public static class ResourceBundle.Control extends Object
API Level 09	java.util	ResourceBundle.Control	Added Field	public static final long TTL_DONT_CACHE
API Level 09	java.util	ResourceBundle.Control	Added Field	public static final long TTL_NO_EXPIRATION_CONTROL
API Level 09	java.util	ResourceBundle.Control	Added Field	public static final List<String> FORMAT_CLASS
API Level 09	java.util	ResourceBundle.Control	Added Field	public static final List<String> FORMAT_DEFAULT
API Level 09	java.util	ResourceBundle.Control	Added Field	public static final List<String> FORMAT_PROPERTIES
API Level 09	java.util	ResourceBundle.Control	Added Constructor	protected ResourceBundle.Control ()
API Level 09	java.util	ResourceBundle.Control	Added Method	public boolean needsReload(String baseName, Locale locale, String format, ClassLoader loader, ResourceBundle bundle, long loadTime)
API Level 09	java.util	ResourceBundle.Control	Added Method	public final String toResourceName(String bundleName, String suffix)
API Level 09	java.util	ResourceBundle.Control	Added Method	public List<Locale> getCandidateLocales(String baseName, Locale locale)
API Level 09	java.util	ResourceBundle.Control	Added Method	public List<String> getFormats(String baseName)
API Level 09	java.util	ResourceBundle.Control	Added Method	public Locale getFallbackLocale(String baseName, Locale locale)
API Level 09	java.util	ResourceBundle.Control	Added Method	public long getTimeToLive(String baseName, Locale locale)



API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	ResourceBundle.Control	Added Method	public ResourceBundle newBundle(String baseName, Locale locale, String format, ClassLoader loader, boolean reload)
API Level 09	java.util	ResourceBundle.Control	Added Method	public static ResourceBundle.Control getControl(List<String> formats)
API Level 09	java.util	ResourceBundle.Control	Added Method	public static ResourceBundle.Control getNoFallbackControl(List<String> formats)
API Level 09	java.util	ResourceBundle.Control	Added Method	public String toBundleName(String baseName, Locale locale)
API Level 09	java.util	ServiceConfigurationError	Added Error	public class ServiceConfigurationError extends Error
API Level 09	java.util	ServiceConfigurationError	Added Constructor	public ServiceConfigurationError (String message)
API Level 09	java.util	ServiceConfigurationError	Added Constructor	public ServiceConfigurationError (String message, Throwable cause)
API Level 09	java.util	ServiceLoader	Added Class	public final class ServiceLoader extends Object implements Iterable<S>
API Level 09	java.util	ServiceLoader	Added Method	public Iterator<S> iterator()
API Level 09	java.util	ServiceLoader	Added Method	public static <S> ServiceLoader<S> load(Class<S> service)
API Level 09	java.util	ServiceLoader	Added Method	public static <S> ServiceLoader<S> load(Class<S> service, ClassLoader classLoader)
API Level 09	java.util	ServiceLoader	Added Method	public static <S> ServiceLoader<S> loadInstalled(Class<S> service)
API Level 09	java.util	ServiceLoader	Added Method	public String toString()
API Level 09	java.util	ServiceLoader	Added Method	public void reload()
API Level 09	java.util	Arrays	Added Method	int binarySearch(T[], int, int, T, Comparator<?, super, T>)
API Level 09	java.util	Arrays	Added Method	int binarySearch(byte[], int, int, byte)
API Level 09	java.util	Arrays	Added Method	int binarySearch(char[], int, int, char)
API Level 09	java.util	Arrays	Added Method	int binarySearch(double[], int, int, double)
API Level 09	java.util	Arrays	Added Method	int binarySearch(float[], int, int, float)
API Level 09	java.util	Arrays	Added Method	int binarySearch(int[], int, int, int)
API Level 09	java.util	Arrays	Added Method	int binarySearch(Object[], int, int, Object)
API Level 09	java.util	Arrays	Added Method	int binarySearch(long[], int, int, long)
API Level 09	java.util	Arrays	Added Method	int binarySearch(short[], int, int, short)
API Level 09	java.util	Arrays	Added Method	T[] copyOf(T[], int)
API Level 09	java.util	Arrays	Added Method	T[] copyOf(U[], int, Class<?, extends, T[]>)
API Level 09	java.util	Arrays	Added Method	boolean[] copyOf(boolean[], int)
API Level 09	java.util	Arrays	Added Method	byte[] copyOf(byte[], int)
API Level 09	java.util	Arrays	Added Method	char[] copyOf(char[], int)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	Arrays	Added Method	double[] copyOf(double[], int)
API Level 09	java.util	Arrays	Added Method	float[] copyOf(float[], int)
API Level 09	java.util	Arrays	Added Method	int[] copyOf(int[], int)
API Level 09	java.util	Arrays	Added Method	long[] copyOf(long[], int)
API Level 09	java.util	Arrays	Added Method	short[] copyOf(short[], int)
API Level 09	java.util	Arrays	Added Method	T[] copyOfRange(T[], int, int)
API Level 09	java.util	Arrays	Added Method	T[] copyOfRange(U[], int, int, Class<?, extends, T[]>)
API Level 09	java.util	Arrays	Added Method	boolean[] copyOfRange(boolean[], int, int)
API Level 09	java.util	Arrays	Added Method	byte[] copyOfRange(byte[], int, int)
API Level 09	java.util	Arrays	Added Method	char[] copyOfRange(char[], int, int)
API Level 09	java.util	Arrays	Added Method	double[] copyOfRange(double[], int, int)
API Level 09	java.util	Arrays	Added Method	float[] copyOfRange(float[], int, int)
API Level 09	java.util	Arrays	Added Method	int[] copyOfRange(int[], int, int)
API Level 09	java.util	Arrays	Added Method	long[] copyOfRange(long[], int, int)
API Level 09	java.util	Arrays	Added Method	short[] copyOfRange(short[], int, int)
API Level 09	java.util	Calendar	Added Method	String getDisplayName(int, int, Locale)
API Level 09	java.util	Calendar	Added Method	(Map<String, Integer>) getDisplayNames(int, int, Locale)
API Level 09	java.util	Calendar	Added Field	int ALL_STYLES
API Level 09	java.util	Calendar	Added Field	int LONG
API Level 09	java.util	Calendar	Added Field	int SHORT
API Level 09	java.util	Collections	Added Method	Queue<T> asLifoQueue(Deque<T>)
API Level 09	java.util	Collections	Added Method	Set<E> newSetFromMap(Map<E, Boolean>)
API Level 09	java.util	LinkedList	Added Method	Iterator<E> descendingIterator()
API Level 09	java.util	LinkedList	Added Method	boolean offerFirst(E)
API Level 09	java.util	LinkedList	Added Method	boolean offerLast(E)
API Level 09	java.util	LinkedList	Added Method	E peekFirst()
API Level 09	java.util	LinkedList	Added Method	E peekLast()
API Level 09	java.util	LinkedList	Added Method	E pollFirst()
API Level 09	java.util	LinkedList	Added Method	E pollLast()
API Level 09	java.util	LinkedList	Added Method	E pop()
API Level 09	java.util	LinkedList	Added Method	void push(E)
API Level 09	java.util	LinkedList	Added Method	boolean removeFirstOccurrence(Object)
API Level 09	java.util	LinkedList	Added Method	boolean removeLastOccurrence(Object)
API Level 09	java.util	Locale	Added Field	Locale ROOT
API Level 09	java.util	Properties	Added Method	void load(Reader)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	Properties	Added Method	void store(Writer, String)
API Level 09	java.util	Properties	Added Method	Set<String> stringPropertyNames()
API Level 09	java.util	PropertyResourceBundle	Added Constructor	PropertyResourceBundle(Reader)
API Level 09	java.util	ResourceBundle	Added Method	void clearCache()
API Level 09	java.util	ResourceBundle	Added Method	void clearCache(ClassLoader)
API Level 09	java.util	ResourceBundle	Added Method	boolean containsKey(String)
API Level 09	java.util	ResourceBundle	Added Method	ResourceBundle getBundle(String, Locale, Control)
API Level 09	java.util	ResourceBundle	Added Method	ResourceBundle getBundle(String, Control)
API Level 09	java.util	ResourceBundle	Added Method	ResourceBundle getBundle(String, Locale, ClassLoader, Control)
API Level 09	java.util	ResourceBundle	Added Method	Set<String> handleKeySet()
API Level 09	java.util	ResourceBundle	Added Method	Set<String> keySet()
API Level 09	java.util	Scanner	Added Method	Scanner reset()
API Level 09	java.util	TreeMap	Modified Class	public class TreeMap<K, V> extends AbstractMap<K, V> implements SortedMap<K, V>, NavigableMap<K, V>, Cloneable, Serializable
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) ceilingEntry(K)
API Level 09	java.util	TreeMap	Added Method	K ceilingKey(K)
API Level 09	java.util	TreeMap	Added Method	NavigableSet<K> descendingKeySet()
API Level 09	java.util	TreeMap	Added Method	(NavigableMap<K, V>) descendingMap()
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) firstEntry()
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) floorEntry(K)
API Level 09	java.util	TreeMap	Added Method	K floorKey(K)
API Level 09	java.util	TreeMap	Added Method	(NavigableMap<K, V>) headMap(K, boolean)
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) higherEntry(K)
API Level 09	java.util	TreeMap	Added Method	K higherKey(K)
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) lastEntry()
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) lowerEntry(K)
API Level 09	java.util	TreeMap	Added Method	K lowerKey(K)
API Level 09	java.util	TreeMap	Added Method	NavigableSet<K> navigableKeySet()
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) pollFirstEntry()
API Level 09	java.util	TreeMap	Added Method	(Entry<K, V>) pollLastEntry()
API Level 09	java.util	TreeMap	Added Method	(NavigableMap<K, V>) subMap(K, boolean, K, boolean)
API Level 09	java.util	TreeMap	Added Method	(NavigableMap<K, V>) tailMap(K, boolean)
API Level 09	java.util	TreeSet	Added Method	E ceiling(E)
API Level 09	java.util	TreeSet	Added Method	Iterator<E> descendingIterator()

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util	TreeSet	Added Method	NavigableSet<E> descendingSet()
API Level 09	java.util	TreeSet	Added Method	E floor(E)
API Level 09	java.util	TreeSet	Added Method	NavigableSet<E> headSet(E, boolean)
API Level 09	java.util	TreeSet	Added Method	E higher(E)
API Level 09	java.util	TreeSet	Added Method	E lower(E)
API Level 09	java.util	TreeSet	Added Method	E pollFirst()
API Level 09	java.util	TreeSet	Added Method	E pollLast()
API Level 09	java.util	TreeSet	Added Method	NavigableSet<E> subSet(E, boolean, E, boolean)
API Level 09	java.util	TreeSet	Added Method	NavigableSet<E> tailSet(E, boolean)
API Level 09	java.util.logging	Logger	Added Field	String GLOBAL_LOGGER_NAME
API Level 09	java.util.zip	DeflaterInputStream	Added Class	public class DeflaterInputStream extends FilterInputStream
API Level 09	java.util.zip	DeflaterInputStream	Added Constructor	public DeflaterInputStream(InputStream in)
API Level 09	java.util.zip	DeflaterInputStream	Added Constructor	public DeflaterInputStream(InputStream in, Deflater deflater)
API Level 09	java.util.zip	DeflaterInputStream	Added Constructor	public DeflaterInputStream(InputStream in, Deflater deflater, int bufferSize)
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public boolean markSupported()
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public int available()
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public int read()
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public int read(byte[] buffer, int byteOffset, int byteCount)
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public long skip(long byteCount)
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public void close()
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public void mark(int limit)
API Level 09	java.util.zip	DeflaterInputStream	Added Method	public void reset()
API Level 09	java.util.zip	InflaterOutputStream	Added Class	public class InflaterOutputStream extends FilterOutputStream
API Level 09	java.util.zip	InflaterOutputStream	Add Field	protected final byte[] buf
API Level 09	java.util.zip	InflaterOutputStream	Add Field	protected final Inflater inf
API Level 09	java.util.zip	InflaterOutputStream	Added Constructor	public InflaterOutputStream (OutputStream out)
API Level 09	java.util.zip	InflaterOutputStream	Added Constructor	public InflaterOutputStream (OutputStream out, Inflater inf)
API Level 09	java.util.zip	InflaterOutputStream	Added Constructor	public InflaterOutputStream (OutputStream out, Inflater inf, int bufferSize)
API Level 09	java.util.zip	InflaterOutputStream	Added Method	public void close()
API Level 09	java.util.zip	InflaterOutputStream	Added Method	public void finish()
API Level 09	java.util.zip	InflaterOutputStream	Added Method	public void flush()
API Level 09	java.util.zip	InflaterOutputStream	Added Method	public void write(byte[] bytes, int offset, int byteCount)
API Level 09	java.util.zip	InflaterOutputStream	Added Method	public void write(int b)

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	java.util.zip	ZipError	Added Error	public class ZipError extends InternalError
API Level 09	java.util.zip	ZipError	Added Constructor	public ZipError (String s)
API Level 09	javax.net.ssl	SSLParameters	Added Class	public class SSLParameters
API Level 09	javax.net.ssl	SSLParameters	Added Constructor	public SSLParameters()
API Level 09	javax.net.ssl	SSLParameters	Added Constructor	public SSLParameters(String[] cipherSuites)
API Level 09	javax.net.ssl	SSLParameters	Added Constructor	public SSLParameters(String[] cipherSuites, String[] protocols)
API Level 09	javax.net.ssl	SSLParameters	Added Method	public boolean getNeedClientAuth()
API Level 09	javax.net.ssl	SSLParameters	Added Method	public boolean getWantClientAuth()
API Level 09	javax.net.ssl	SSLParameters	Added Method	public String[] getCipherSuites()
API Level 09	javax.net.ssl	SSLParameters	Added Method	public String[] getProtocols()
API Level 09	javax.net.ssl	SSLParameters	Added Method	public void setCipherSuites(String[] cipherSuites)
API Level 09	javax.net.ssl	SSLParameters	Added Method	public void setNeedClientAuth(boolean needClientAuth)
API Level 09	javax.net.ssl	SSLParameters	Added Method	public void setProtocols(String[] protocols)
API Level 09	javax.net.ssl	SSLParameters	Added Method	public void setWantClientAuth(boolean wantClientAuth)
API Level 09	javax.net.ssl	SSLContext	Added Method	SSLContext getDefault()
API Level 09	javax.net.ssl	SSLContext	Added Method	SSLParameters getDefaultSSLParameters()
API Level 09	javax.net.ssl	SSLContext	Added Method	SSLParameters getSupportedSSLParameters()
API Level 09	javax.net.ssl	SSLContext	Added Method	void setDefault(SSLContext)
API Level 09	javax.net.ssl	SSLContextSpi	Added Method	SSLParameters engineGetDefaultSSLParameters()
API Level 09	javax.net.ssl	SSLContextSpi	Added Method	SSLParameters engineGetSupportedSSLParameters()
API Level 09	javax.net.ssl	SSLEngine	Added Method	SSLParameters getSSLParameters()
API Level 09	javax.net.ssl	SSLEngine	Added Method	void setSSLParameters(SSLParameters)
API Level 09	javax.net.ssl	SSLSocket	Added Method	SSLParameters getSSLParameters()
API Level 09	javax.net.ssl	SSLSocket	Added Method	void setSSLParameters(SSLParameters)
API Level 09	javax.security.auth.x	X500Principal	Added Constructor	X500Principal(String, Map<String, String>)
API Level 09	javax.security.auth.x	X500Principal	Added Method	String getName(String, Map<String, String>)
API Level 09	javax.sql	CommonDataSource	Added Interface	public interface CommonDataSource
API Level 09	javax.sql	StatementEvent	Added Class	public class StatementEvent extends EventObject
API Level 09	javax.sql	StatementEvent	Added Constructor	public StatementEvent (PooledConnection con, PreparedStatement statement, SQLException exception)
API Level 09	javax.sql	StatementEvent	Added Constructor	public StatementEvent (PooledConnection con, PreparedStatement statement).
API Level 09	javax.sql	StatementEvent	Added Method	public SQLException getSQLException ()
API Level 09	javax.sql	StatementEvent	Added Method	public PreparedStatement getStatement ()
API Level 09	javax.sql	StatementEventListener	Added Interface	public interface StatementEventListener extends EventListener

API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	javax.sql	ConnectionPoolDataSource	Modified Interface	public interface ConnectionPoolDataSource extends CommonDataSource
API Level 09	javax.sql	ConnectionPoolDataSource	Removed Method	PrintWriter getLogWriter()
API Level 09	javax.sql	ConnectionPoolDataSource	Removed Method	int getLoginTimeout()
API Level 09	javax.sql	ConnectionPoolDataSource	Removed Method	void setLogWriter(PrintWriter)
API Level 09	javax.sql	ConnectionPoolDataSource	Removed Method	void setLoginTimeout(int)
API Level 09	javax.sql	DataSource	Modified Interface	public interface DataSource extends CommonDataSource, Wrapper
API Level 09	javax.sql	DataSource	Removed Method	PrintWriter getLogWriter()
API Level 09	javax.sql	DataSource	Removed Method	int getLoginTimeout()
API Level 09	javax.sql	DataSource	Removed Method	void setLogWriter(PrintWriter)
API Level 09	javax.sql	DataSource	Removed Method	void setLoginTimeout(int)
API Level 09	javax.sql	PooledConnection	Added Method	void addStatementEventListener(StatementEventListener)
API Level 09	javax.sql	PooledConnection	Added Method	void removeStatementEventListener(StatementEventListener)
API Level 09	javax.sql	RowSet	Added Method	void setAsciiStream(int, InputStream)
API Level 09	javax.sql	RowSet	Added Method	void setBinaryStream(int, InputStream)
API Level 09	javax.sql	RowSet	Added Method	void setBinaryStream(String, InputStream)
API Level 09	javax.sql	RowSet	Added Method	void setBlob(int, InputStream)
API Level 09	javax.sql	RowSet	Added Method	void setBlob(int, InputStream, long)
API Level 09	javax.sql	RowSet	Added Method	void setBlob(String, InputStream)
API Level 09	javax.sql	RowSet	Added Method	void setBlob(String, InputStream, long)
API Level 09	javax.sql	RowSet	Added Method	void setBlob(String, Blob)
API Level 09	javax.sql	RowSet	Added Method	void setCharacterStream(int, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setCharacterStream(String, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setClob(int, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setClob(int, Reader, long)
API Level 09	javax.sql	RowSet	Added Method	void setClob(String, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setClob(String, Reader, long)
API Level 09	javax.sql	RowSet	Added Method	void setClob(String, Clob)
API Level 09	javax.sql	RowSet	Added Method	void setNCharacterStream(int, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setNCharacterStream(int, Reader, long)
API Level 09	javax.sql	RowSet	Added Method	void setNCharacterStream(String, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setNCharacterStream(String, Reader, long)
API Level 09	javax.sql	RowSet	Added Method	void setNClob(int, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setNClob(int, Reader, long)



API Level	Package	Class	Change Type	Change from Java SE 6
API Level 09	javax.sql	RowSet	Added Method	void setNClob(int, NClob)
API Level 09	javax.sql	RowSet	Added Method	void setNClob(String, Reader)
API Level 09	javax.sql	RowSet	Added Method	void setNClob(String, Reader, long)
API Level 09	javax.sql	RowSet	Added Method	void setNClob(String, NClob)
API Level 09	javax.sql	RowSet	Added Method	void setNString(int, String)
API Level 09	javax.sql	RowSet	Added Method	void setNString(String, String)
API Level 09	javax.sql	RowSet	Added Method	void setRowId(int, RowId)
API Level 09	javax.sql	RowSet	Added Method	void setRowId(String, RowId)
API Level 09	javax.sql	RowSet	Added Method	void setSQLXML(int, SQLXML)
API Level 09	javax.sql	RowSet	Added Method	void setSQLXML(String, SQLXML)
API Level 11	java.util	Deque	Added Method	boolean contains(Object)
API Level 11	java.util	Deque	Added Method	E element()
API Level 11	java.util	Deque	Added Method	Iterator<E> iterator()
API Level 11	java.util	Deque	Added Method	boolean offer(E)
API Level 11	java.util	Deque	Added Method	E peek()
API Level 11	java.util	Deque	Added Method	E poll()
API Level 11	java.util	Deque	Added Method	E remove()
API Level 11	java.util	Deque	Added Method	boolean remove(Object)
API Level 11	java.util	NavigableMap	Added Method	(SortedMap<K, V>) headMap(K)
API Level 11	java.util	NavigableMap	Added Method	(SortedMap<K, V>) subMap(K, K)
API Level 11	java.util	NavigableMap	Added Method	(SortedMap<K, V>) tailMap(K)
API Level 11	java.util	NavigableSet	Added Method	SortedSet<E> headSet(E)
API Level 11	java.util	NavigableSet	Added Method	Iterator<E> iterator()
API Level 11	java.util	NavigableSet	Added Method	SortedSet<E> subSet(E, E)
API Level 11	java.util	NavigableSet	Added Method	SortedSet<E> tailSet(E)
API Level 11	java.util	Queue	Added Method	boolean add(E)

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API Level	Package	Class	Change Type	Change from Java SE 7
API Level 19	java.lang	AutoCloseable	Added Interface	public interface AutoCloseable
API Level 19	java.lang	ReflectiveOperationException	Added Exception	public class ReflectiveOperationException extends Exception
API Level 19	java.lang	ReflectiveOperationException	Added Constructor	public ReflectiveOperationException ()
API Level 19	java.lang	ReflectiveOperationException	Added Constructor	public ReflectiveOperationException (String message)
API Level 19	java.lang	ReflectiveOperationException	Added Constructor	public ReflectiveOperationException (Throwable cause)
API Level 19	java.lang	ReflectiveOperationException	Added Constructor	public ReflectiveOperationException (String message, Throwable cause)
API Level 19	java.lang	SafeVarargs	Added Annotation	public abstract @interface SafeVarargs implements Annotation
API Level 19	java.lang	AssertionError	Added Constructor	AssertionError(String, Throwable)
API Level 19	java.lang	Boolean	Added Method	int compare(boolean, boolean)
API Level 19	java.lang	Byte	Added Method	int compare(byte, byte)
API Level 19	java.lang	Character	Added Method	int compare(char, char)
API Level 19	java.lang	Character	Added Method	String getName(int)
API Level 19	java.lang	Character	Added Method	char highSurrogate(int)
API Level 19	java.lang	Character	Added Method	boolean isAlphabetic(int)
API Level 19	java.lang	Character	Added Method	boolean isBmpCodePoint(int)
API Level 19	java.lang	Character	Added Method	boolean isIdeographic(int)
API Level 19	java.lang	Character	Added Method	boolean isSurrogate(char)
API Level 19	java.lang	Character	Added Method	char lowSurrogate(int)
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ALCHEMICAL_SYMBOLS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ANCIENT_GREEK_MUSICAL_NOTATION
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ANCIENT_GREEK_NUMBERS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ANCIENT_SYMBOLS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ARABIC_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock AVESTAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock BALINESE
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock BAMUM
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock BAMUM_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock BATAK
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock BRAHMI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock BUGINESE
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CARIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CHAM
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CJK_STROKES

API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CJK_UNIFIED_IDEOGRAPHS_EXTENSION_C
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CJK_UNIFIED_IDEOGRAPHS_EXTENSION_D
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock COMBINING_DIACRITICAL_MARKS_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock COMMON_INDIC_NUMBER_FORMS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock COPTIC
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock COUNTING_ROD_NUMERALS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CUNEIFORM
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CUNEIFORM_NUMBERS_AND_PUNCTUATION
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CYRILLIC_EXTENDED_A
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock CYRILLIC_EXTENDED_B
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock DEVANAGARI_EXTENDED
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock DOMINO_TILES
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock EGYPTIAN_HIEROGLYPHS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock EMOTICONS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ENCLOSED_ALPHANUMERIC_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ENCLOSED_IDEOGRAPHIC_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ETHIOPIC_EXTENDED
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ETHIOPIC_EXTENDED_A
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock ETHIOPIC_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock GEORGIAN_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock GLAGOLITIC
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock HANGUL_JAMO_EXTENDED_A
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock HANGUL_JAMO_EXTENDED_B
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock IMPERIAL_ARAMAIC
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock INSCRIPTIONAL_PAHLAVI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock INSCRIPTIONAL_PARTHIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock JAVANESE
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock KAITHI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock KANA_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock KAYAH_LI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock KHAROSHTHI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock LATIN_EXTENDED_C
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock LATIN_EXTENDED_D
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock LEPCHA
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock LISU

API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock LYCIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock LYDIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock MAHJONG_TILES
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock MANDAIC
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock MEETEI_MAYEK
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock MISCELLANEOUS_SYMBOLS_AND_PICTOGRAPHS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock MODIFIER_TONE_LETTERS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock MYANMAR_EXTENDED_A
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock NEW_TAI_LUE
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock NKO
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock OLD_PERSIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock OLD_SOUTH_ARABIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock OLD_TURKIC
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock OL_CHIKI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock PHAGS_PA
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock PHAISTOS_DISC
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock PHOENICIAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock PHONETIC_EXTENSIONS_SUPPLEMENT
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock PLAYING_CARDS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock REJANG
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock RUMI_NUMERAL_SYMBOLS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock SAMARITAN
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock SAURASHTRA
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock SUNDANESE
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock SUPPLEMENTAL_PUNCTUATION
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock SYLOTI_NAGRI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock TAI_THAM
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock TAI_VIET
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock TIFINAGH
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock TRANSPORT_AND_MAP_SYMBOLS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock UNIFIED_CANADIAN_ABORIGINAL_SYLLABICS_EXTENDED
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock VAI
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock VEDIC_EXTENSIONS
API Level 19	java.lang	Character.UnicodeBlock	Added Field	UnicodeBlock VERTICAL_FORMS

API Level 19	java.lang	ClassNotFoundException	Modified Exception	public class ClassNotFoundException extends ReflectiveOperationException
API Level 19	java.lang	IllegalAccessException	Modified Exception	public class IllegalAccessException extends ReflectiveOperationException
API Level 19	java.lang	InstantiationException	Modified Exception	public class InstantiationException extends ReflectiveOperationException
API Level 19	java.lang	Integer	Added Method	int compare(int, int)
API Level 19	java.lang	LinkageError	Added Constructor	LinkageError(String, Throwable)
API Level 19	java.lang	Long	Added Method	int compare(long, long)
API Level 19	java.lang	NoSuchFieldException	Modified Exception	public class NoSuchFieldException extends ReflectiveOperationException
API Level 19	java.lang	NoSuchMethodException	Modified Exception	public class NoSuchMethodException extends ReflectiveOperationException
API Level 19	java.lang	Short	Added Method	int compare(short, short)
API Level 19	java.lang	System	Added Method	String lineSeparator()
API Level 19	java.lang	Throwable	Added Constructor	Throwable(String, Throwable, boolean, boolean)
API Level 19	java.lang	Throwable	Added Method	void addSuppressed(Throwable)
API Level 19	java.lang	Throwable	Added Method	Throwable[] getSuppressed()
API Level 19	java.lang.reflect	InvocationTargetException	Modified Exception	public class InvocationTargetException extends ReflectiveOperationException
API Level 19	java.lang.reflect	Modifier	Added Method	int classModifiers()
API Level 19	java.lang.reflect	Modifier	Added Method	int constructorModifiers()
API Level 19	java.lang.reflect	Modifier	Added Method	int fieldModifiers()
API Level 19	java.lang.reflect	Modifier	Added Method	int interfaceModifiers()
API Level 19	java.lang.reflect	Modifier	Added Method	int methodModifiers()
API Level 19	java.net	DatagramSocket	Modified Class	public class DatagramSocket implements Closeable
API Level 19	java.net	URLConnection	Added Method	void setFixedLengthStreamingMode(long)
API Level 19	java.net	URLConnection	Added Field	long fixedContentLengthLong
API Level 19	java.net	InetAddress	Added Method	InetAddress getLoopbackAddress()
API Level 19	java.net	InetSocketAddress	Added Method	String getHostString()
API Level 19	java.net	NetworkInterface	Added Method	NetworkInterface getByIndex(int)
API Level 19	java.net	NetworkInterface	Added Method	int getIndex()
API Level 19	java.net	ServerSocket	Modified Class	public class ServerSocket implements Closeable
API Level 19	java.net	Socket	Modified Class	public class Socket implements Closeable
API Level 19	java.nio	CharBuffer	Modified Method	CharBuffer subSequence(int, int)
API Level 19	java.nio.channels	FileLock	Added Method	void close()

API Level 19	java.nio.channels	Selector	Modified Class	public abstract class Selector extends Object implements Closeable
API Level 19	java.nio.charset	StandardCharsets	Added Class	public final class StandardCharsets extends Object
API Level 19	java.nio.charset	StandardCharsets	Added Field	public static final Charset ISO_8859_1
API Level 19	java.nio.charset	StandardCharsets	Added Field	public static final Charset US_ASCII
API Level 19	java.nio.charset	StandardCharsets	Added Field	public static final Charset UTF_16
API Level 19	java.nio.charset	StandardCharsets	Added Field	public static final Charset UTF_16BE
API Level 19	java.nio.charset	StandardCharsets	Added Field	public static final Charset UTF_16LE
API Level 19	java.nio.charset	StandardCharsets	Added Field	public static final Charset UTF_8
API Level 19	java.util	Objects	Added Class	public class Objects extends Object
API Level 19	java.util	Objects	Added Method	public static <T> int compare(T a, T b, Comparator<? super T> c)
API Level 19	java.util	Objects	Added Method	public static <T> T requireNonNull(T o)
API Level 19	java.util	Objects	Added Method	public static <T> T requireNonNull(T o, String message)
API Level 19	java.util	Objects	Added Method	public static boolean deepEquals(Object a, Object b)
API Level 19	java.util	Objects	Added Method	public static boolean equals(Object a, Object b)
API Level 19	java.util	Objects	Added Method	public static int hash(Object... values)
API Level 19	java.util	Objects	Added Method	public static int hashCode(Object o)
API Level 19	java.util	Objects	Added Method	public static String toString(Object o)
API Level 19	java.util	Objects	Added Method	public static String toString(Object o, String nullString)
API Level 19	java.util	BitSet	Added Method	int previousClearBit(int)
API Level 19	java.util	BitSet	Added Method	int previousSetBit(int)
API Level 19	java.util	BitSet	Added Method	byte[] toByteArray()
API Level 19	java.util	BitSet	Added Method	long[] toLongArray()
API Level 19	java.util	BitSet	Added Method	BitSet valueOf(byte[])
API Level 19	java.util	BitSet	Added Method	BitSet valueOf(ByteBuffer)
API Level 19	java.util	BitSet	Added Method	BitSet valueOf(LongBuffer)
API Level 19	java.util	BitSet	Added Method	BitSet valueOf(long[])
API Level 19	java.util	Collections	Added Method	Enumeration<T> emptyEnumeration()
API Level 19	java.util	Collections	Added Method	Iterator<T> emptyIterator()
API Level 19	java.util	Collections	Added Method	ListIterator<T> emptyListIterator()
API Level 19	java.util	ConcurrentModificationException	Added Constructor	ConcurrentModificationException(String, Throwable)
API Level 19	java.util	ConcurrentModificationException	Added Constructor	ConcurrentModificationException(Throwable)
API Level 19	java.util	Currency	Added Method	Set<Currency> getAvailableCurrencies()
API Level 19	java.util	Currency	Added Method	String getDisplayName()
API Level 19	java.util	Currency	Added Method	String getDisplayName(Locale)

API Level 19	java.util	Scanner	Modified Class	public final class Scanner extends Object implements Closeable, Iterator<String>
API Level 19	java.util.logging	Logger	Added Method	Logger getGlobal()
API Level 19	java.util.zip	Deflater	Added Method	int deflate(byte[], int, int, int)
API Level 19	java.util.zip	Deflater	Added Field	int FULL_FLUSH
API Level 19	java.util.zip	Deflater	Added Field	int NO_FLUSH
API Level 19	java.util.zip	Deflater	Added Field	int SYNC_FLUSH
API Level 19	java.util.zip	DeflaterOutputStream	Added Constructor	DeflaterOutputStream(OutputStream, boolean)
API Level 19	java.util.zip	DeflaterOutputStream	Added Constructor	DeflaterOutputStream(OutputStream, Deflater, boolean)
API Level 19	java.util.zip	DeflaterOutputStream	Added Constructor	DeflaterOutputStream(OutputStream, Deflater, int, boolean)
API Level 19	java.util.zip	GZIPOutputStream	Added Constructor	GZIPOutputStream(OutputStream, boolean)
API Level 19	java.util.zip	GZIPOutputStream	Added Constructor	GZIPOutputStream(OutputStream, int, boolean)
API Level 19	java.util.zip	ZipFile	Added Method	String getComment()
API Level 19	javax.crypto	AEADBadTagException	Added Exception	public class AEADBadTagException extends BadPaddingException
API Level 19	javax.crypto	AEADBadTagException	Added Constructor	public AEADBadTagException ()
API Level 19	javax.crypto	AEADBadTagException	Added Constructor	public AEADBadTagException (String message)
API Level 19	javax.crypto	Cipher	Added Method	void updateAAD(byte[])
API Level 19	javax.crypto	Cipher	Added Method	void updateAAD(byte[], int, int)
API Level 19	javax.crypto	Cipher	Added Method	void updateAAD(ByteBuffer)
API Level 19	javax.crypto	CipherSpi	Added Method	void engineUpdateAAD(byte[], int, int)
API Level 19	javax.crypto	CipherSpi	Added Method	void engineUpdateAAD(ByteBuffer)
API Level 19	javax.crypto.spec	GCMParameterSpec	Added Class	public class GCMParameterSpec extends Object implements AlgorithmParameterSpec
API Level 19	javax.crypto.spec	GCMParameterSpec	Added Method	public GCMParameterSpec (int tagLen, byte[] iv)
API Level 19	javax.crypto.spec	GCMParameterSpec	Added Method	public GCMParameterSpec (int tagLen, byte[] iv, int offset, int byteCount)
API Level 19	javax.crypto.spec	GCMParameterSpec	Added Method	public byte[] getIV ()
API Level 19	javax.crypto.spec	GCMParameterSpec	Added Method	public int getTLen ()
API Level 21	java.util	IllformedLocaleException	Added Exception	public class IllformedLocaleException extends RuntimeException
API Level 21	java.util	IllformedLocaleException	Added Constructor	public IllformedLocaleException ()
API Level 21	java.util	IllformedLocaleException	Added Constructor	public IllformedLocaleException (String message)
API Level 21	java.util	IllformedLocaleException	Added Constructor	public IllformedLocaleException (String message, int errorIndex)
API Level 21	java.util	IllformedLocaleException	Added Method	public int getErrorIndex ()



API Level 21	java.util	Locale.Builder	Added Class	public static final class Locale.Builder extends Object
API Level 21	java.util	Locale.Builder	Added Constructor	public Locale.Builder ()
API Level 21	java.util	Locale.Builder	Added Method	public Locale build()
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder addUnicodeLocaleAttribute(String attribute)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder clear()
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder clearExtensions()
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder removeUnicodeLocaleAttribute(String attribute)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setExtension(char key, String value)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setLanguage(String language)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setLanguageTag(String languageTag)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setLocale(Locale locale)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setRegion(String region)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setScript(String script)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setUnicodeLocaleKeyword(String key, String type)
API Level 21	java.util	Locale.Builder	Added Method	public Locale.Builder setVariant(String variant)
API Level 21	java.util	Locale	Added Method	Locale forLanguageTag(String)
API Level 21	java.util	Locale	Added Method	String getDisplayScript()
API Level 21	java.util	Locale	Added Method	String getDisplayScript(Locale)
API Level 21	java.util	Locale	Added Method	String getExtension(char)
API Level 21	java.util	Locale	Added Method	Set<Character> getExtensionKeys()
API Level 21	java.util	Locale	Added Method	String getScript()
API Level 21	java.util	Locale	Added Method	Set<String> getUnicodeLocaleAttributes()
API Level 21	java.util	Locale	Added Method	Set<String> getUnicodeLocaleKeys()
API Level 21	java.util	Locale	Added Method	String getUnicodeLocaleType(String)
API Level 21	java.util	Locale	Added Method	String toLanguageTag()
API Level 21	java.util	Locale	Added Field	char PRIVATE_USE_EXTENSION
API Level 21	java.util	Locale	Added Field	char UNICODE_LOCALE_EXTENSION





































Oracle America, Inc. v. Google Inc.  
(N.D. Cal. Case No. CV 10-03561)

Declaring Code from Java SE 7  
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